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May 6, 2008 Reference No. 038443

Ms. Karen Cibulskis
Remedial Project Manager
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Mail Code SR-6J
Chicago, IL 60604

Dear Karen:

Re: Final Leachate Seep Investigation Letter Work Plan
South Dayton Dump and Landfill Site, Moraine, Ohio (Site)

This Letter Work Plan presents the South Dayton Dump and Landfill Potentially Responsible Party Group's (PRP Group's) Work Plan for a Leachate Seep Investigation at the Site. A Site plan showing Site topography, including embankments, is provided on Figure 1. This work will help address data gaps and provide information to aid in the completion of a Feasibility Study (FS).

The PRP Group has prepared this Letter Work Plan based on the discussions between the PRP Group and USEPA in February and April 2008. The Letter Work Plan incorporates comments received from USEPA on April 2 and May 1, 2008.

The objectives of this Work Plan are to:

1. complete a seep inspection to identify the location, extent, and characteristics of seeps observed along Site embankments and in other on-Site and near-Site areas;
2. characterize seeps observed along Site embankments and in other areas; and
3. identify any area(s) that may require further investigation.

The work associated with achieving these objectives is described further below.

VISUAL SEEP INSPECTION

CRA will complete a visual inspection of:

- the embankments and nearby areas on the west side of the Site (adjacent to the Great Miami River);

- embankments and nearby areas to the north including to the north of the Valley Asphalt property;
- areas surrounding the Quarry Pond;
- embankments and nearby areas along the central access road;
- embankments and nearby areas in the vicinity of the air curtain destructor;
- embankments and the area in the vicinity of the Small Pond; and
- embankments and the area in the vicinity of the Large Pond.

This assessment will consist of a visual inspection of the entire embankment surface, nearby areas, and low lying areas with an objective to document any evidence of groundwater or leachate discharge from any portion of the bank and other nearby or low-lying areas. Specific items to be investigated include identifying erosion rills, areas of surface staining and/or stressed vegetation, and wet or saturated areas resulting from seeping liquid.

CRA will prepare a photographic log for the inspection. The photographic log will list the date of each photograph, a specific description of what the photograph depicts, its location, and the photographer.

Seep inspections will not be performed during precipitation events and will be performed no sooner than 24 hours after a precipitation event. To the extent practicable, given the project schedule and USEPA notification requirements, the PRP Group will schedule the seep inspection to occur after several days of dry conditions (based on long term weather forecasts). In the event of precipitation during the seep inspection, field activities will be suspended and will not recommence until 24 hours after the rain has ceased. The USEPA will be notified of any delays in the seep inspection. Also the weather conditions will be noted in the daily field logs.

Potential seeps encountered during the Survey, Geophysical Investigation, or other Site work will be flagged, and these areas will be inspected during the seep inspection if the potential seep is encountered prior to the Leachate Seep Investigation or at a later date if the potential seep is found after the Leachate Seep Investigation and does not correspond to a previously identified seep.

SEEP CHARACTERIZATION

Should leachate seeps, surface staining, stressed vegetation, or other evidence of a leachate seep be identified in any of the embankments or in other areas, CRA will flag the location and survey it using a hand-held global positioning system (GPS) device and record the coordinates. CRA will then record the characteristics of each seep area including color of staining; area of staining; whether

the seep is active or not active; estimate of seep flow; color of seep flow; presence of erosion, pooling, or odor; PID reading; and any other pertinent or identifying details. CRA will also record potential downgradient receptors for each seep, such as landfill interior (where capping alternatives will be evaluated in the FS), the Great Miami River, Quarry Pond, etc. After surveying the location and recording seep observations, CRA will immediately proceed to collect leachate and/or soil samples (as detailed below) at the identified location before continuing on to the next area.

If an active seep is observed, liquid sampling will be attempted. The area located immediately beneath the seep will be dug out using a clean shovel or trowel. A clean sample jar or pail will be set into the dug out area and the liquid will be allowed to accumulate in the container. The liquid will be transferred to sample containers for submission to the analytical laboratory. As the volume of liquid may be limited, prioritization of requested analyses for the sample will be as follows: Target Compound List (TCL) volatile organic compounds (VOCs), Target Analyte List (TAL) metals and cyanide, TCL semi-volatile organic compounds (SVOCs), TCL pesticides, and TCL polychlorinated biphenyls (PCBs).

CRA will attempt to place the sample jar or pail on an angle in order to encourage leachate to flow into the jar rather than dripping in. VOC sample vials will be filled by slowly, smoothly, and carefully transferring seep water from the large clean sample jar to the VOC vial, without splashing, and sealing the vial to ensure that no air bubbles are allowed to remain in the vial. VOC sampling will be conducted first, once sufficient liquid has been allowed to collect in the large clean sample jar. Trip blanks, field blanks and duplicate samples (if sufficient sample is available) will be collected in conjunction with the seep sampling. Trip blanks will be submitted with each sample shipment to the analytical laboratory. Field blanks will be collected at a frequency of one per every ten seep samples collected. Field duplicates will be collected at a frequency of one per twenty seep samples (sample volume permitting). The Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) provide additional details and instruction on sample collection, preservation, and quality assurance/quality control.

If a sufficient volume of liquid to fill sample jars is not produced by the seep, CRA will collect a sample of the surface soil in the area of the seep. The soil sample will be collected from a saturated portion of the soil immediately beneath the seepage. The surface soil sample will be collected as part of the leachate seep investigation fieldwork and will be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals, and asbestos.

If no active seep is observed but indirect evidence of a seep is observed (erosion rills, stressed vegetation, etc.), then CRA will collect a surface soil sample from the area where the observation was made. The soil sample will be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals, and asbestos.

All work will be performed in accordance with the FSP, QAPP, and Site-Specific Health and Safety Plan (HASP) pending USEPA's approval of these documents.

IDENTIFY AREAS NEEDING FURTHER INVESTIGATION

The field observations and analytical data generated from any liquid seep or soil sampling will be reviewed and evaluated. Areas where stressed vegetation was observed may be considered as alternative sampling areas for the Test Pit / Test Trench Investigation. Analytical data will be evaluated against USEPA Region 9 Preliminary Remediation Goals (PRGs). If liquid or soil analytical data indicate that there are constituents present at concentrations greater than Region 9 PRGs, then the area where the sample was collected may require further investigation or assessment for the FS. If liquid or soil sample data do not exceed Region 9 PRGs, then the area where the sample was collected will not require further leachate seep assessment for the purpose of completing the FS. Additional leachate seep assessment at these locations may, however, be required as part of Remedial Design (e.g., to evaluate seasonal and / or yearly fluctuations in leachate seeps).

If the soil contains constituents at concentrations greater than the applicable Ecological Screening Criteria, and the seep area is outside the area to be evaluated for capping alternatives, then the area may require further assessment as part of the RI / FS for areas not addressed by the FS. If the seep is in the interior of the landfill (where capping alternatives will be evaluated in the FS), then the area will be noted and evaluated as part of the FS. The assessment and evaluation of data generated as part of this investigation will be presented in a technical memorandum. Modification or adjustments to further investigative work proposed for the Site in 2008 will be discussed with the USEPA prior to implementation.

SCHEDULE

The leachate seep inspection will begin within two weeks of USEPA approval of this Letter Work Plan, or the relevant sections of the FSP and QAPP, or USEPA's review of the HASP, whichever occurs later, and will be completed over a two-day period of time (weather permitting). The PRP Group will provide the USEPA with verbal notification 15 days in advance of the initiation of this activity, and will use extended weather reports in an attempt to time the event during dry weather or no sooner than 24 hours after a precipitation event.

REPORTING

The results of the seep inspection and any analytical results (if samples are collected) will be summarized and presented in a technical memorandum. The memorandum, which will include a

description of the field work completed, any deviations from the proposed work and the rationale behind the change, photographs, a figure identifying areas inspected, a figure showing the location of identified seeps indicating which seeps, if any, were active at the time of the inspection, analytical summary tables, and analytical data reports, will be provided to the USEPA within one month of the completion of the proposed work. The technical memorandum will also include a table including seep descriptions and approximate elevations (from the Site survey). The data will be used in the FS and to identify potential areas where further investigation or assessment may be appropriate.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Stephen M. Quigley

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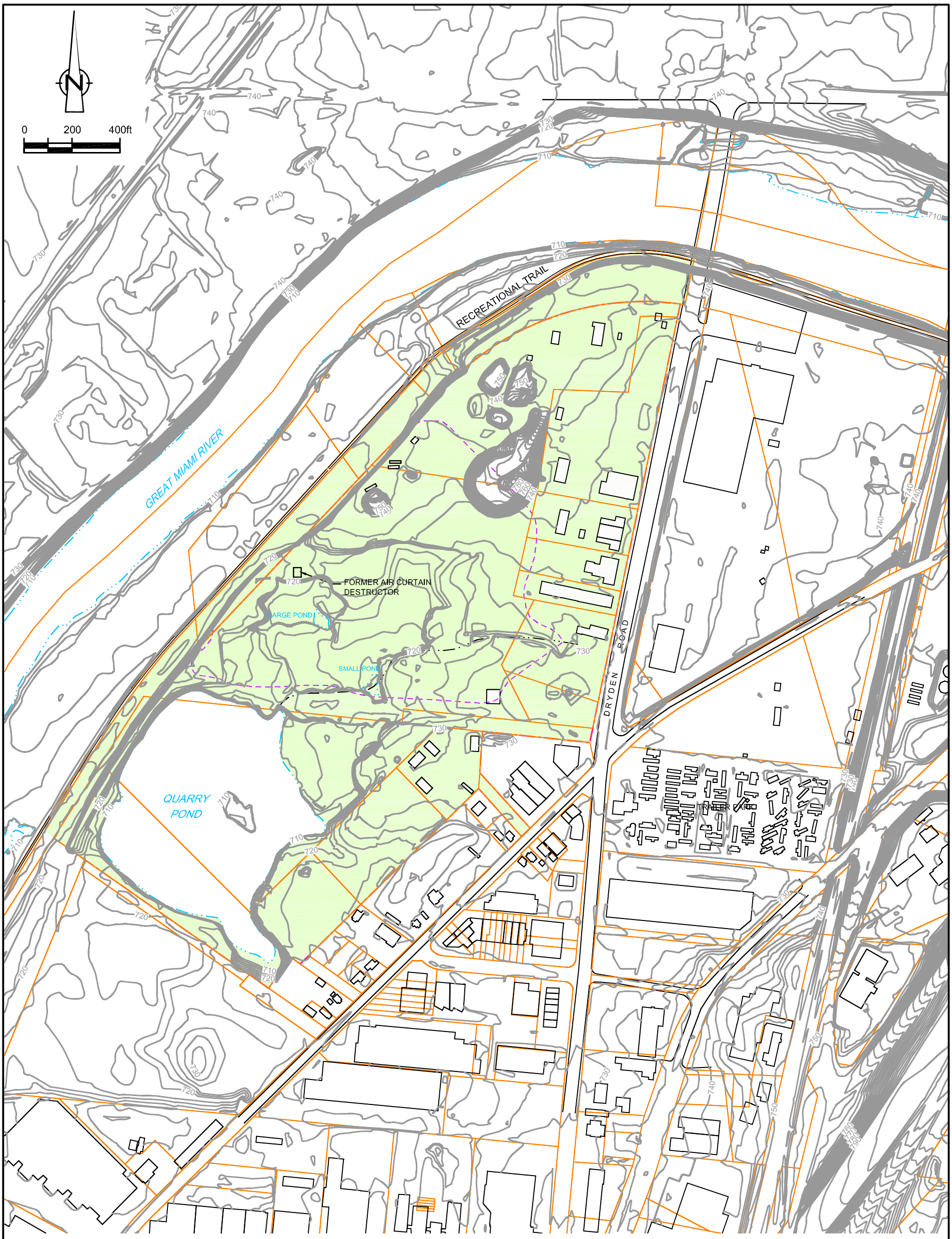
Encl.

c.c. Matt Mankowski, USEPA (PDF)
Matt Justice, Ohio EPA (PDF)
Eric Kroger, CH2M Hill (PDF)
Scott Blackhurst, Kelsey Hayes Company (PDF)
Wray Blattner, Thompson Hine (PDF)
Ken Brown, ITW (PDF)
Jim Campbell, Engineering Management Inc. (PDF)
Tim Hoffman, Representing Kathryn Boesch and Margaret Grillot (PDF)
Paul Jack, Castle Bay (PDF)
Robin Lunn, Mayer Brown (PDF)
Roger McCready, NCR (PDF)
Karen Mignone, Pepe & Hazard (PDF)
Adam Loney, CRA (PDF)



LEGEND

- SITE BOUNDARY (SOW 2006)
- PRELIMINARY DIRECT CONTACT RISK PRESUMPTIVE REMEDY AREA
- 730 EXISTING GROUND CONTOUR (2 FT CONTOUR INTERVAL)
- EDGE OF WATER
- PARCEL BOUNDARY
- AREA OF LEACHATE SEEP SURVEY

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.

figure 1

LEACHATE SEEP INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

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